Moline Street PCB Site
Statement of Work (SOW)
December 12, 2013

I. INTRODUCTION

This Statement of Work (SOW) provides an overview of the tasks and activities necessary to conduct investigation and removal activities at the former magnesium extrusion facility (Site) southern building(s) located at 3555 Moline Street in Aurora, Colorado (Figure 1). The work activities summarized below will be divided and conducted separately by The Dow Chemical Company (TDCC) and the property tenant/prospective purchaser, Hi-Tec Plastics, and include Site investigation, building demolition, soil excavation and removal, and site restoration. To the extent required by EPA, TDCC and Hi-Tec Plastics will each prepare a work plan to detail the work each will perform as described in this SOW.

II. REMOVAL OF BUILDING A (Hi-Tec Plastics)

As shown on Figure 2, Building A is attached to Building B and will need to be removed to access Building B. Building A is an open metal storage shed.

III. SITE INVESTIGATION (TDCC)

The Site investigation consists of various tasks associated with delineation of polychlorinated biphenyl (PCB)-contaminated materials. Upon completion of the investigation activities, data obtained will be reviewed in conjunction with historical data to estimate the extent and volume of impacted soils and the degree of building demolition necessary to facilitate excavation activities.

Asbestos Building Inspection and Sampling - Asbestos samples will be collected from Buildings C and B (Figure 2) and the buildings will be inspected by a Colorado Certified Asbestos Building Inspector. If asbestos is present in the buildings to be demolished, asbestos abatement will be conducted prior to any demolition work.

Wipe Sampling - Wipe samples will be collected from the walls and ceiling of each building (Buildings A through I) prior to the investigation and soil removal action. If PCB wipe samples indicate that PCB dust is present in the building, personal protective equipment may be upgraded to Level C for the investigation activities.

When the building demolition and soil removal are completed, wipe samples will be collected from the walls and ceiling of Building D or any other building where excavation dust is a concern. If PCB dust is present, the building(s) will be cleaned to remove the dust.

Soil and Concrete Sampling - The investigation will involve drilling borings to delineate the PCB contamination (Figure 3). Soil samples generally will be collected to a depth of approximately 4 feet below ground surface with select borings drilled deeper to delineate the vertical extent of PCB contamination. Groundwater will not be sampled. Delineation borings will be used to establish the initial excavation extent, which will be used to estimate removal volumes and aid in planning the anticipated demolition areas. The actual depth of contamination will be determined during excavation activities.

During drilling activities, coring will be required to penetrate the concrete slab at a majority of the delineation borings. Concrete cores will be tested for the presence of PCBs to the extent practical, i.e., based on saturation levels and the ability of the analytical testing to detect PCBs.

Soil samples collected will be field screened using a Polychlorinated Biphenyl Field Test Kit manufactured by Dexsil Corporation (L2000DX). The field kits have detection limits between 3 mg/kg and 2,000 mg/kg and will be used as a field screening confirmation tool, with 10% of the samples split and sent off for confirmation laboratory analysis.

IV. BUILDING DEMOLITION, SOIL EXCAVATION AND DISPOSAL (TDCC)

Once the Site Investigation is complete a contaminant excavation plan will be developed. The criteria for design of the excavation plan is removal of PCB contaminated soils outside of excavation limits necessary to preserve the integrity of building foundations, with the exception of Buildings A and C, which will be demolished, and Building B, which may be fully or partially demolished. To the extent any portion of Building B remains, soil removal will be done in a manner to preserve the integrity of that portion. The excavation limits will be established by TDCC's consulting structural and geotechnical engineers. Prior to performance of contaminated soil excavation, the excavation plan will be submitted to EPA and Hi-Tec Plastics for review, discussion, and ultimate approval by EPA.

If determined feasible by the results of the site investigation, clean-up of buildings E-I will be prioritized to allow for occupancy. Hi-Tec Plastics will construct a wall between building D and E to segregate the new tenants work space from the on-going clean-up activities, if determined safe for the tenants. The wall could be constructed at a location that was safe given the adjacent excavation. General descriptions of the anticipated tasks are included below.

Demolition of Building C and Possible Demolition of Building B – The building structures (roof and walls) will be removed to access the concrete slab and PCB contaminated soil beneath the concrete. Prior to building demolition, required shoring will be addressed. As the building structure is taken down, the building material will be separated into recyclable material and landfill material.

If the investigation results indicated the need to demolish a portion of Building B, TDCC will evaluate the feasibility of partial demolition. If partial demolition is not feasible the entire building will be demolished. TDCC will be responsible for any backfill and resurfacing of excavations on the interior of the building in accordance with Section V. Hi-Tec Plastics will be responsible for resurfacing on the exterior of the building as well as any reconstruction of walls and roofs resulting from partial demolition of Building B.

PCB-Contaminated Concrete – In areas where known PCB contaminated concrete surface is present, it will undergo abrasive grinding to remove the contamination. If the PCB contamination cannot be removed by abrasive grinding, the concrete will be removed by saw-cutting or chipping and separated as necessary for disposal.

Excavation of Contaminated Soils - The target depth and extent of the excavation will be estimated following the completion of the Site investigation; however, excavation will continue until sampling confirms that PCB concentrations are below 25 mg/kg in surficial soil (one foot below ground surface) or 100 mg/kg in deeper soil (greater than one foot below ground surface), groundwater is reached, or until no longer deemed safe for personnel or building integrity. Safety measures (e.g., shoring, benching, and/or sloping) will be implemented for excavation areas deeper than four feet per Occupational Safety and Health Administration (OSHA) guidance. Building D (Figure 2) is a concrete building that will not be demolished during the removal activities. If PCB- contaminated soil is present near the foundation of Building D, the soil will only be removed to the extent that the building stability is not compromised.

Building B is located adjacent to a landfill that is at the property boundary (Figure 2). Soil excavation will only be conducted to approximately 3 feet in this building to avoid sloughing of the landfill. Building B may only be partially demolished, depending on the extent of PCB contaminated soil.

Transport and Disposal

PCB contaminated materials (soil and concrete) will be hauled to disposal facilities approved by EPA. Demolition debris will be hauled to an approved landfill.

Confirmation Sampling

After soil excavation is completed, confirmation sampling of the excavation sidewalls and bottom will be performed to confirm removal of soil exceeding 25 mg/kg of PCBs for surficial soil (one foot below ground surface) or 100 mg/kg of PCBs in deeper soil (greater than one foot below ground surface). PCB contaminated soil or concrete than cannot be removed due to proximity to the Building D foundations will be documented in an environmental covenant for the property to be filed by Hi Tec.

V. BACKFILL INSIDE BUILDINGS (TDCC)

TDCC will prepare a backfill plan for the interior of portions of buildings which require excavation for contaminated soil removal. The backfill plan shall be submitted to EPA and Hi-Tec Plastics for discussion and ultimate EPA approval. The backfill plan will outline specific materials; capping of remaining contaminants; placement and compaction requirements; and applicable standards which will result in a prepared subgrade suitable for replacement of the concrete floor as discussed in Section VII. In general, the backfill placement method will be direct release from trucks and reworking of the soil using common earth-moving equipment. Backfill will subsequently be placed in sequentially discrete work zones in loose lifts (6-8") followed by necessary compaction and/or grading to achieve a uniform backfill thickness and surface. Clean backfill materials will be approved by EPA and will be placed until reaching the current sub-grade surface, where it will be smoothed and prepared for replacement of the concrete floor.

VI. BACKFILL OUTSIDE BUILDINGS (TDCC)

TDCC will prepare a backfill plan and submit to EPA and Hi-Tec Plastics for discussion and ultimate EPA approval. The backfill plan will outline specific materials; capping of remaining contaminates; placement and compaction requirements; and applicable standards which will result in a compacted subgrade suitable for placement of concrete or asphalt suitable to the existing use of the areas outside the buildings. In general, the backfill placement method will be direct release from trucks and reworking of the soil using common earth-moving equipment. Backfill will subsequently be placed in sequentially discrete work zones in loose lifts (6-8") followed by necessary compaction and/or grading to achieve a uniform backfill thickness and surface. Clean backfill materials will be approved by EPA and will be placed until reaching the current subgrade surface.

VII. SITE RESTORATION (TDCC and Hi-Tec Plastics)

TDCC will replace the concrete floor slabs at locations in which the existing floors are removed to facilitate contaminate soil removal in the buildings or portions of buildings that remain. The concrete floor slabs will be designed and replaced in accordance with applicable standards in a manner that will result in a floor slab equivalent to the existing floor but, in the case of Building D, absent the foundations and sumps associated with former hydraulic press equipment.

Hi-Tec Plastics will place concrete or asphalt outside of the buildings to effectively cap any remaining contamination. The placement of the concrete or asphalt will be placed in such a manner that promotes drainage and prevents water from ponding. Site restoration will be considered complete when the site is returned to normal use. No buildings will be replaced as part of the site restoration.

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